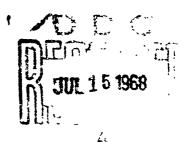
SYSTEMS THEORY AND THE COMMUNIST ORBIT Thomas W. Robinson

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SYSTEMS THEORY AND THE COMMENTST ORBIT

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I. INTRODUCTION

There is now a relatively large and growing literature on the subject of the use of systems theory in political science and in international relations. A significant part of that inquiry has concerned the quastion of the usefulness of systems theory as a tool with which to study regional groupings of states -- known also as subordinate systems or as subsystems. Although the communist system

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For a survey of some of that literature, see Oran A. Young, "The Impact of General Systems Theory on Political Science," General Systems, Vol. 9, 1964, pp. 239-253 and the authors referred to therein. Missing from his list is Charles A. McClelland, whose Theory and the International Systems (New York: MacMillan, 1966) and other works are central to the field.

²See Leonard Binder, "The Middle East as a Subordinate System," World Folitics, Vol. 10, No. 3 (April, 1958), pp. 408-429; Thomas Hodgkin, "The New West Africa State System," University of Toronto Quarterly, Vol. 31, No. 1

tional characteristics, 3 no attempts have been made, to this writer's knowledge, to apply systems theory to the study of the communist orbit. The purpose of this paper is to consider whether there are any gains to be obtained from analyzing what we know of communist affairs in terms of systems theory. It does not attempt to describe the characteristics of the "communist camp" in any detail greater than is necessary to obtain preliminary answers to this, and related, questions.

⁽October 1961), pp. 74-82; George Modelski, "International Relations and Area Studies: The Case of Southeast Asia,"

International Relations (London), Vol. 2, No. 2 (April 1961), pp. 143-155; Michel Brecher, "International Relations and Asian Studies; The Subordinate State System of Southern Asia," World Politics, Vol. 15, No. 2 (January, 1963), pp. 213-235; Stanley Hoffman, "Discord in Community: The North Atlantic Area as a Partial International System,"

International Organization, Vol. 17, No. 3 (Summer 1963), pp. 521-549; J. William Zartman, "Africa as a Subordinate State System in International Relations," International Organization, Vol. 21, No. 3 (Summer 1967), pp. 545-564; and Larry W. Bowman, "The Subordinate State System of Southern Africa," International Studies Quarterly (forthcoming).

³See for instance, George Modelski, <u>The Communist International System</u>, Research Monograph No. 9 (Princeton, N. J.: Centre of International Studies, Princeton University, 1960); Zbigniew Brzezinski, "Organization of the Communist Camp," <u>World Politics</u>, Vol. 13, No. 2 (January 1961), pp. 175-209; Michael Kaser, <u>Comecon</u> (New York: Oxford University Press, 1965); and Jan Triska, "The World Communist System," (Stanford University: Stanford Studies of the Communist System, 1965).

make application of systems theory both more interesting and wore difficult than is the case with other regional systems. For one thing, there is the problem of whether to focus only on those states whose governments are communist or, alternatively, to look at the various communist parties themselves. If one makes the latter choice, which would seem desirable if one wants to understand and analyze the focus of communist power, must one then move on to consider as well those parties which are not now the ruling elements of their respective states? Related to this is the question of how the boundaries of the system are to be defined. If we take as the communist system merely the 14 communist states, we have a fairly compact, contiguous system with definite geographic boundaires. The location

⁴By the term international communism we mean the series of parties and states, their activities and relations, which have called themselves communist at one or another time during the period since the organization of the Cominform in 1948. This definition is narrow in that it excludes all aspects and activities of the international communist movement, such as the Comintern, before that time, but is broad in that it includes, theoretically, some Marxist parties, such as the Trotskyites in Ceylon, which others would deny as being communist. The utility of such a definition in the era of the Sino-Soviet split is obvious.

of Cuba outside the area of the Eurasian land mass, however, is a significant exception to the rule -- adhered to in all previous uses of systems theory in studying regional systems -- of requiring all members of the system to be located in the same geographic area. The communist case thus permits us to remove this restriction -- which in some regards seems rather artificial anyways -- and to study political systems whose members are physically dispersed and where the degree of mutual interpenetration with other systems is great. The degree of dispersal is, of course, much greater if we adopt parties instead of states as our unit of analysis. Then we must give up any attempt at geographical limitation, since the bounds of the communist system, now including non-ruling parties, would be coterminal with the limits of the globe itself. A third peculiarity of the communist system concerns the range of power within the system (defined, for the moment, in the narrower sense of party-states). There is one world ... power, the Soviet Union, one regional power trending toward world power, China, and a number of other powers ranging from small to medium. In terms of economic power, and rate and stage of growth, there is tremendous variation: at any given time, some economies are rapidly

growing, others are stagnant or regressing; some are primitive and agricultural, others are modern and industrial; some have small, other very large gross national products. It would be challenging to see whether systems theory can provide a framework within which these variations will fit. Related to this is the distribution of power within the system and the relative changes in its loci. The system has become even more bipolar, as China has continued -- however fitfully -- to grow in strength and this has affected the course of political allegiances within the system as well as the relations of the system with the outside. The communist system exhibits a total hierarchy of power, ranging from the "squirrel" to the "elephant." None of the other systems considered so far have exhibited these properties. It is also the case that many of the members of this system are simultaneously members of a number of other systems. The Soviet Union is a member of the dominant power system, the East-West security system, and the Middle Eastern and Far Eastern regional systems. It penetrates other systems such as the sub-Saharan African system. China is attempting to join the dominant power system, already is a member of the South, Southeast, and East Asian system, and seeks

to penetrate others, such as the Middle East and the various The question arises as to what is the African systems. relation between the communist system and these other systems; depending on the system in question, it could theoretically range from subordination through coordination and autonomy to independence. Finally, the communist subsystem is unique, and hence poses a challenge to systems theory, in that it itself is composed of a number of subsystems. Not only is there the Sino-Soviet system (which has always dominated the larger system), but that subsystem has gone through a number of phases since its inception since 1949. There are also such obvious groups as the East European subsystem, the Soviet-East European system, the communist East Asian system, and the pro-Chinese, pro-Soviet, and (now) the neutral systems. All of the above variations and intricacies, added together, provide a stern challenge to systems theory.

II. SYSTEMS THEORY TERMINOLOGY IN THE COMMUNIST ORBIT CONTEXT

Having established that the empirical characteristics of the communist international system provide both opportunities for and challenges to application of systems theory, we may turn to an examination of systems theory itself to ascertain whether, and which of, its concepts might prove useful. Immediately we are confronted with the realization that systems theory is not at all a unified field, that there are different and, to some extent, competing, meanings of the term 'system,' and that our choice between approaches will determine, to a large degree, the success of our venture. 5 For our purposes, we limit our field of choice to only one of the four "approaches." The four "approaches" are: 1) the general systems approach, as exemplified by the writings of Ludwig von Bertalanffy; 2) the cybernetics network analogy, illustrated in the work of W. Ross Ashby and Morton Kaplan;

This is not to say that there does not exist a definable common outlook upon the part of each of the four approaches listed below. There is a common base, but, as in other fields, it is emphasis upon particular derivative concepts which determines direction of research.

3) modified structural functionalism, as found in the output of Talcott Parsons and extended by Peter Nettel; and 4) the "living systems" approach of James G. Miller. The first, second, and fourth are very similar and distinguish themselves as a group from the Parsonian model. In this paper, we shall investigate the first of these in the context of the communist international system.

General Systems Yearbook, Vol. 1 (1956), pp. 1-10, and his "General Systems Theory - A Critical Review," <u>ibid.</u>, Vol. 7 (1962), pp. 1-20; W. Ross Ashby, <u>Design For a Brain</u> (London, Chapman and Hall, 1966); Morton A. Kaplan, <u>System and Process in International Politics</u> (Chicago: University of Chicago Press, 1957); William C. Mitchell, <u>Sociological Analysis and Politics</u>, Englewood-Cliffs, N. J.: (Prentice Hall, 1967); Walter Buckley, <u>Sociology and Modern Systems Theory</u> (Englewood-Cliffs, N. J.: Prentice Hall, 1967); Peter Nettel, "The Concept of Systems in Political Science," <u>Political Studies</u>, Vol. XIV, No. 3 (1966), pp. 305-338; and James G. Miller "Living Systems," <u>Behavioral Sciences</u>, Vol. 10, No. 3 (July 1965), pp. 193-238, and No. 4 (Oct. 1965), pp. 337-411.

⁷Lack of space precludes a broader, more comparative application than that attempted here. A serial application of each of the four approaches to the data provided by communist system history, followed by a theoretical and data-oriented comparison of the results would be the obvious way to proceed. One would want, however, to make preliminary comparison of the four approaches without reference to the communist international system, But that would carry the investigation beyond the scope of the present inquiry in direction as well as space.

(1) Oran Young 8 has looked closely at the terminology of general systems theory as applied to political science and has arrived at a series of composite and extremely useful definitions of each of the basic terms in general systems theory. Altogether, 54 concepts are noted and are grouped into four classes: (a) systemic and descriptive factors; (b) regulation and maintenance; (c) dynamics and change; and (d) decline and breakdown. It may prove useful to examine a number of these in terms of the historical data presented by the communist system since 1949. Let us try, over the next several pages, to describe that system in general systems theory terms. Our format will be to list the relevant concepts in turn, to provide a suitable defication of each, and then to analyze each by reference to the communist international system. Finally, we suggest examples of possible analogies to the communist system. This description and analysis, while presumably of interest in itself, will also set the stage for a more extensive utilization of several of the concepts by reference to a particular time and space framework.

^{8&}quot;A Survey of General Systems Theory," General Systems, Vol. 9, 1964, pp. 61-80.

1) system: a set of objects together with the relations between objects and attributes.

On this definition, almost any way of looking at the communist countries can be seen as a system. The definition is open-ended and, with its adoption, the question of what is a system really becomes unimportant. Attention is drawn to the lower level of the attributes of the system, and, therewith, judgments as to definition of the system become a function of the efficacy, for research and understanding, of those attributes. Examples of communist system analogies would be the Sino-Soviet system, the ruling parties' system, the Soviet-East European system, and the industrialized communist system.

2) <u>isomorphism</u>: a 1-1 correspondence between objects in different systems which preserves relationships between the objects.

Isomorphism provides a means of investigating properties within states, parties, societies, or economies which are very similar to one another in structure and function and which tend to make the communist system as a whole function more nearly as a unit. Thus, for instance, we would like to know how and whether the very similar but subtly different definitions of democratic centralism of the Soviet and Chinese parties are reflected in intraparty politics and whether this, in turn, results in practices

and policies affecting Sino-Soviet relations. Investigations of isomorphism, its deviations and dynamics, allows the asking of questions which otherwise would perhaps not have been thought of. Examples of isomorphism would be the set of all state planning commissions in party-ruled states, the rules of democratic centralism, use of mass organizations as transmission belts during Stalinism, and party control of state and military through parallel hierarchies.

3) boundary: a line or area determining inclusion in or exclusion from a system.

This concept, like that of the system itself, depends almost totally on other concepts for its meaning. Being thus simultaneously too derivative and too general, it is not as important as the concept of environment, to which it is related. We cannot, however, abstract from such important questions as whether the shape of the geographic area of the communist system, the length of its common boundary with the outside (as well as the shape and length of its internal boundaries, and the degree of compactness and contiguity of the system are determinants of the relation of the system as a whole with its environment. Examples of boundary would

be geographic boundaries of the set of party-ruled states, and membership in a communist party.

4) environment: The set of all objects whose attributes affect the system and also those objects whose attributes are changed by the behavior of the system.

Note first that this definition includes two separable sets -- that which influences the system and that which is influenced by the system. They may well be the same, as in the case of non-communist states. They may be separable, however: recipients of Soviet military aid are unlikely to exert as much influence on the givers of that aid as they are influenced by them. Actually, there is a continuum between these two sets: some noncommunists are influenced much more by communist behavior than others, while some communist institutions are influenced much more by the attributes and actions of the equivalent non-communist institutions than others. question of the reciprocal degree of influence of the environment and the system is raised in the definition of this concept. Examples of environment would be the set of all objects whose attributes affect the system and also those objects whose attributes are changed by the behavior of the system.

5) <u>integration</u>: actual mechanisms and organizational principles which hold a system together.

Many of the formal aspects of bloc organization can be studied under this rubric. Measures of the degree of integration and its trend can be worked up. The interesting idea, however, is the possibility of studying informal modes of integration in addition to those appearing in tables of organization. The influence of commonly (or not so commonly) held ideological precepts on integration is just as much a candidate for study as is the influence of the 1957 and 1960 Moscow Conferences or the personal disposition of Communist leaders toward each other. Examples of integration would be proletarian internationalism, Warsaw Treaty Organization, Comecon, treaties and agreements on party and state levels, and exchange of tourists, personnel, and mail.

6) <u>differentiation</u>: distinguishability of the components of a system.

Many of the standard cross-national and cross-cultural comparisons can be placed in this category. Indices of distinguishability in each case need to be constructed and some way found to compare these indices (a process which involves weighing, a difficult matter). The list of attributes capable of differentiation can, of course,

be made indefinitely long. What is needed are theories which link several variables together in a cause-effect manner, and where measurement of one variable can substitute for a group of them. Examples of differentiation would be domestic differences of members of the communist bloc -- economic, leadership, and national character; political alignments within the bloc and their changes; and differences in past histories, paths to power, relations with the environment, and ideological outlook.

7a) subsystem (special purpose): a functional component of a larger system fulfilling the condition of a system in itself but which also plays a specialized role in the operation of the larger system.

Under this category it may be fruitful to speak about networks of subsystems and hierarchies of subsystems.

One could, for instance, regard the series of bilateral alliance treaties which the various communist states maintain with each other as a network of alliances and investigate its properties. This network could be compared with other treaty networks (trade, for instance, within the bloc and "friendship" treaties with states external to the bloc) to establish a hierarchy of such networks in terms of importance, duration, and completeness.

One could also establish networks of communist parties grouped according to sub-system. There would be mutual interpenetration among ruling party networks and non-ruling party networks. Lines of contact could be geographic, institutional, or ideological. Again, hierarchies of such networks could be set up. Examples of special purpose sub-systems would be the relation of the Sino-Soviet system to the other ruling communist states, the role of the European parties in the world communist movement, and the function of Mongolia in Sino-Soviet relations.

- 7b) <u>sub-system (general purpose)</u>: a separately operating system within a larger system which does not play a specialized role in the larger system.
- 8a) <u>interdependence</u>: a relationship such that a change in a particular part causes a change in all the other parts in the total system.
- 8b) <u>independence</u>: a set of parts that are completely unrelated.

Here are opportunities to investigate what the causal linkages are between the Sino-Soviet sub-system and the international communist system as a whole. Can causal "rules" be discovered? Why (not only how) did destalinization so greatly affect every party, why some more than

others, and why at different times? It is hard to think of anything in communist area studies that can be considered completely unrelated. Many things are nearly unrelated, and there obviously is a continuum between interdependence and independence. It may be worthwhile studying items which should be closely allied but in fact turn out not to be so, just as it might pay to try to discover interdependence among apparently unrelated items. The theories and methods for such work take us away from systems analysis, but at least we are sensitized to the question. Examples of communist system analogies of interdependence are the fact that deterioration of Sino-Soviet relations causes general loosening of bloc ties, and the relation of Stalin's death to destalinization. are probably no examples of independence. It is, of course, possible to imagine parts of the system which have extremely little to do with one another (for example, North Vietnamese peasants and Polish war widows), but within political systems, independence is rare and, often, trivial.

- 9a) centralized system vs.
- 9b) decentralizing system:

where one element plays a dominant role, vs. where there is no leading element and control over the system is spread among its elements. We want to know what are the conditions of centralization; can they be replicated or restored if change comes; and is change irreversible? Analysis of centralization vs. decentralization must be carried out in terms of concepts of systemic stability, types and magnitudes of feedback, entropy, systemic growth and systemic breakdown. An example of centralized vs. decentralized systems would be the communist bloc and the international communist bloc under Stalin compared with its history after 1953.

10) <u>stability</u>: when systemic variables remain within defined limits. (related concepts: ultrastable system, multistable system, stable equilibrium, unstable equilibrium).

Emphasis here is on discovering the limits of the rules of the system. In 1956, Poland went to those limits but not beyond them, whereas Hungary transgressed them by declaring its intention of leaving the Warsaw Treaty Organization and of becoming a multiparty, although still Socialist, state. The existence of two systemic rules and their limits were thus discovered: 1) secession from the bloc is not allowed; 2) leadership of the party state systems must always be exclusively communist.

Emphasis also is on those factors which remain relatively unchanged for long periods. One must be clear here to speak only of systemic variables and not to confuse

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variables peculiar to one system with variables of another system. Thus, in literary policy, the Soviets have continued to make plain the relatively narrow limits of divergence from "Socialist realism," while the Poles have, until recently, defined ever-wider limits. But is literary policy a systemic variable? Probably so, if we look at how much, historically, intellectuals have influenced history -- even Soviet history. A confirmation is seen in the reaction of Mao Tse-tung to literary deviation of the slightest sort in the period before the "Cultural Revolution." He was quite clear in his belief in the systemic nature of literary policy of China: intellectual dissent, if left unchecked, causes restoration of capitalism.

11) <u>homeostasis</u>: the self-regulating properties of a living system.

This is a very important concept. Contained within it are an investigation of the rules of domestic behavior of a national communist system and the feedback processes by which the system regulates itself. An example of homeostasis would be the attempt by ruling parties to see that their state stays on the path of socialist, or communist, construction, both through positive efforts in that direction and forbidding of left and right deviations.

12) <u>feedback</u>: a condition where a part of output is fed back into input to affect succeeding outputs.

Every system -- social, political, economic -- feeds back part of its output into the system. This affects systemic growth (usually positively) but also systemic efficiency and systemic goals (see further differentiation of the feedback concept below). In the general sense presented here the concept is too broad for detailed application. An example of feedback would be when part of the output of a communist political system -- decisions and policies -- is fed back into the system to affect systemic efficiency and future decision and policies.

Thus, the Soviet decision after Khrushchev in 1964-65 to end public polemics with the Chinese affected not only Sino-Soviet relations and the Chinese view of the Soviets but also affected Soviet internal reporting of events in China and, hence, the Soviet view of China.

- 13a) <u>negative feedback</u>: feedback opposing the main driving force.
- 13b) positive feedback: feedback reinforcing the main driving force.
- 13c) goal-seeking feedback: feedback resulting in adjustive responses necessary to reach a pre-set goal.
- 13d) goal-changing feedback: feedback resulting in self-modifying responses which lead to alteration in pre-set goals of the system.

It is necessary first to determine what are the "main driving force(s)" of the system. Obviously, they cause general trends in the historical sense and are closely related to systemic goals. If positive and negative feedback are used alternately and in such a manner as to produce a steady state, they obviously are the homeostatic regulatory mechanisms. In the period up to 1956, the main driving force in communist intra-bloc international relations was the Soviet drive to continue domination of the bloc. The Soviet investments in, advice to, and control over the other communist party-led states (including China) all were positive feedback contributing to this force. Negative feedback was evidenced in local opposition to this drive, especially from China after 1956. From 1956-1959, the main driving force continued the same but now positive and negative feedback tended to balance each other. From 1960 on, negative feedback from China and East Europe overbalanced positive feedback from the Soviet Union and the result was not only a dimunition of Soviet control over bloc activities but also the appearance of goal-changing feedback, on the Soviet side, seeking to change the system from Soviet-dominated to a multi-polar system. This system stressed intra-systemic

independence and interdependence and relied for stability on international institutions, the reconstruction of ideological principles, and the working out of common goals. Soviet positive actions in 1956-60 could just as well be described as seeking the goal of continued hegemony. For each of these, however, the Chinese devised an appropriate negative feedback. Other examples of communist system analogies would be, for positive and negative feedback: Sino-Soviet relations (1950-1966); for negative feedback: Polish-Soviet relations, 1956; for positive feedback: the effect of the communization of Cuba on the bloc, considering in this case the main driving force to be the desire to see extrabloc successes.

- 14a) positive control: choosing and keeping courses so as to reach goals.
- 14b) <u>negative control</u>: changing courses so as to escape threats.

Political and military strategy and methods can be discussed under this concept. Goals are temporarily regarded as constant. Much of communist intrabloc and extrabloc diplomatic and political history can be written in terms of this concept. Examples of positive control and negative control would be Soviet missile-related actions in Cuba prior to and after Kennedy's challenge (the Soviets did retain control of their actions throughout the crisis), Chinese

strategy toward the Vietnam war (positive control and negative control) vs. apparent loss of control over some aspects of her foreign policy when Red Guards invaded the Foreign Ministry in the summer of 1967.

- 15) entropy: the degree of disorder of a system.
- 15a) <u>positive entropy</u>: a tendency toward maximum entropy, or the most probable distribution of X in the system is maximum.
- 15b) <u>negative entropy</u>: a tendency toward increase in order and complexity of an open system.

Entropy is an important concept in systems theory. In the communist case, one can see both positive and negative entropy, as per the examples below. This points up that the two tendencies can coexist for a time. While in the short run the tendencies may be contradictory, in the long run one or the other must win out. In fact, the progress of this contest might be a good indication of systemic change. Thus, for instance, if COMECON and the WTO, which are composed of those communist party-led states grouped (with some exceptions) around the Soviet Union, increase both in strength and importance to those states, while the other communist party-led states continued to be excluded, this would point, in the absence of similar institutions coupling some of these states to the other

party-led states, to a transformation of the bloc from a singular entity to two distinct, although coupled, blocs. An example of positive entropy would be the tendency to disperse power in the communist international system from the Soviet center to the East European and East Asian peripheries, with consequent complexities in decision-making for all. An example of negative entropy would be the rise of international communist institutions -- COMECON, WTO, alliance structures, multilateral trade patterns, and subsystem political groupings (e.g. China-Albania; non-Chinese-Asian; revisionist East European).

16) repair: replacement of a part by a structural replica or a functional equivalent.

This concept is important in showing whether a system is capable of change and, if so, how it actually does. If entropy is a constant tendency in every system, periodic repair would seem necessary. The question which must be answered, however, is whether a given change leads to positive or negative entropy. Mao's cultural revolution seems designed to lead to positive entropy, whereas one would normally think that institutional reform would lead to negative entropy. Examples of repair would be Malerkov's assumptions of Stalin's party duties on the latter's death and Khrushchev's recentralizations of party and governmental

duties in his person, and Mao's attempt to replace the CCP with a new party.

- 17) growth and reproduction
- 17a) <u>reproduction</u>: reproduction of additional systems of a similar nature by any process.
- 17b) growth-populational: excess of additions to over subtractions from the system.
- 17c) growth-simple: increase by accretion.
- 17d) growth-structural: growth involving a change in the relations of the parts of the system.

18) dynamism and change

The most important point here is what systemic growth does to the system. Thus, we should concentrate on structural growth. In the communist system, the addition of each member changes the structural properties of the system and some change it more than others. Furthermore, changes in intrasystem alignments change the systemic structure, as does a change in the definition of what a communist state is. Examples of the former would be the switch of Albania's loyalty from the Soviet Union to China and the change in political loyalty of North Korea from the Soviet Union to China to neutrality. Examples of the latter are China's exclusion of Yugoslavia from the list of communist states, the Russian action in excluding Yugoslavia in 1948 from the Cominform (thus denying, at

that time, that the latter was a communist state), her later redefinition of a communist state to reinclude
Yugoslavia, and her expansion of the definition to include
Cuba, which had merely declared herself to be a communist state. An example of reproduction in the communist system would be the spread of communism by adding member states
(or parties). An example of population growth in the communist system would be the spread of communism by a net addition of member states (or parties). An example of simple growth would be the spread of communism by simple addition of member states (or parties), while structural growth is exemplified by the addition of China to the communist system, the addition of Cuba, and the splitting of non-ruling parties along Soviet-Chinese lines.

18a) <u>dynamism</u>: a process of change either through interaction with the environment or through internally generated alterations.

This is a very general concept under which may be subsumed a great deal of this history of the international communist movement. It would seem, however, too general for us as anything other than a framework for speaking about plasticity, elasticity, and change.

18b) plasticity: modification of systemic form from which it will not return to the original configuration.

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18c) <u>elasticity</u>: modification of systemic form from which it will return to the original configuration.

These two concepts form a continuum when applied to sociopolitical systems so that one can speak of the <u>degree</u> of
plasticity or elasticity and the trend of each. In
general, most socio-political systems are very plastic;
despite efforts of decision-makers to minimize irreversible change, every change is in fact irreversible. Despite
the desires of the Soviet leaders to restore the degree
of harmony of Sino-Soviet relations which prevailed in the
middle 1950s, there is probably no possibility of that now.
Relations may be "closer" in the future than they are now
but they will not be constructed on the same basis as
before. No examples can be given for elasticity of the
communist international system; it, like all other
political systems, exhibits a high degree of plasticity.

18d) <u>learning</u>: a process of self-modification in response to (usually repeated) external stimuli.

Every socio-political system engages in a learning process. The important questions here concern the <u>rate</u> of learning, i.e., the intelligence (if we may so speak) of the system and, perhaps more importantly, the relationship between changes in systemic structure and goals.

on the one hand, and learning, on the other hand. In the latter case, it may well be true that, because of the necessity to respond to repeated external stimuli, the system is changing at a rate too fast to produce learning. And it may well be that those stimuli are never repeated -that is usually the case in politics -- or at least that similar stimuli may not be recognized as such. the Soviet-American dominant system, it is probable that some learning, albeit at a very slow rate, has occurred. It is also probable that in other two-state systems of relevance -- Sino-Soviet, Soviet-Polish, Chinese-North Korean, for instance -- learning also occurs. With a three or more state system, it is difficult to say whether learning occurs. Perhaps in institutional settings, such as in Comecon, there is learning on a multilateral basis. And it may be that learning in ideological terms takes place at s ch conferences as the 1957 and 1960 Mcscow meetings. But most intraorbit learning is probably twostate and slow. It must remain an open question as to whether there is any sort of bloc learning as a whole. The structure of the system seems to preclude it.

- (1) <u>reversible change</u>: disturbance(s) resulting in the restoring of the original state.
- (2) <u>irreversible change</u>: disturbance(s) causing a system to move to another state.

Change is obviously closely related to system structure, stability, and feedback. It may be that a slight disturbance will set off irreversible change if the system is unstable and feedback is positive. So it was at the time of the anti-Stalin speech: both the Soviet, the entire communist state system, and the world communist movement (being dependent upon that system) were in unstable equilibrium. When the disturbance represented by Khrushchev's secret speech entered the system, it led to negative feedback, as evidenced by the 1956 events in East Europe, which further destabilized the system. Sino-Soviet relations, which were then in equilibrium, were also adversely affected and led to a series of irreversible and accelerating changes which had all the aspects of negative feedback. On the other hand, when the system was in more nearly stable equilibrium, intrasystemic disturbances did not set up irreversible changes or negative feedback. Thus, the East German revolt of 1953 and the expulsion of Yugoslavia in 1948 did not totally upset the system. Stalin's death, however, did.

concepts are related also to those discussed below: overload, stress, and decay.

19) <u>overload</u>: placing demands on a system which it cannot handle.

Two problems enter here. 1) How does one measure overload in a socio-political system? 2) How does one control for the possibility that demands placed on the system at different times may differentially overload the system, i.e. that the system will be able to handle one load at one time and not be able to handle the same load at another time. Since a socio-political system changes constantly, such a possibility clearly may arise. some cases, it is clear that a political system is overloaded; this is what happens in revolutions, such as the Hungarian revolution in 1956. The Soviet political system does not as yet seem to have been overloaded, for it has never ceased to function, even temporarily, and even in the worst of circumstances (i.e. the Nazi invasion, although Stalin's initial silence might be interpreted as systemic breakdown upon overloading). The problem is to define the strength of the system; only then can one speak, in anything more than figurative terms, of breaking points and overloads.

26) decay: deterioration of the components of the system.

This could prove to be a very important concept in discussing evolution of the communist system. instance, the Sino-Soviet branch of the communist state system weakens (as it obviously has) and is not replaced by another strong branch, the system as a whole is weaker. How are we to measure systemic decay? In the communist system, we could qualitatively and quantitatively analyze rates of change of intrasystem communication, trade, and other such data. We could measure relative "closeness" of alliance, and degree of strength of the member states (as evidenced by rate of economic growth, indications of popular acceptance or dissatisfaction with the party, and rate of turnover of leadership.) Systemic growth or decay must be thought of as the rate of change of systemic strength. Thus, we must measure this factor before talking about decay in anything more than the qualitative sense.

There are other concepts drawn from general systems theory which may or may not be useful in studying communist systems. These include: open and closed systems; organismic and non-organismic systems; symmetry and asymmetry of systems; order of interaction among systems;

state and non-state determined systems; equifinality; steady state; dynamic system; and teleology. They do not seem, however, to be as directly applicable as the terms defined and discussed above and for that reason we do not include them in our listing.

The definitions are to be found in Young, op. cit.

III. A MORE DETAILED INQUIRY

Let us experimentally take the first six of the above list of concepts and see if they aid us in a description of the characteristics of one communist system. We take as our example the "communist international system," i.e. that group of states each of which is ruled by a communist party. Our format will be to consider this sublist of general systems theory concepts, as set forth above, and to determine to what extent they can serve as a framework for and an aid to analysis of this communist system.

System: the communist international system, as defined, possesses a number of attributes and relations between attributes. The states are joined together by a hierarchy of channels of communication, from tourist and exchange of mass-organization delegations at the lower level to interparty written memoranda and diplomatic notes

We could as well have taken any single communist state, any pair of communist states, or any grouping of communist states and termed it a system, just as we could have chosen society or economy or party as the unit of analysis. Systems theory permits -- and in fact encourages -- associations of this sort. We have chosen the state as the unit and defined the system to include all such states, both because of its generality and because that choice makes this essay capable of being compared with others (listed above in note 2) in the same series.

on the upper level. There are international institutions which join some of its members together and signal the existence of special purpose subsystems. There are also a number of other devices, situations, and ideas which serve as the underpinnings of the system. These include similar domestic institutions, both party, mass, and state; a common ideological heritage stemming from Marx, Engels, Lenin, and Stalin; in many cases a common past in the Comintern and even extending to similarities of citizenship; geographic propinquity (Cuba is a significant exception) in the sense that each communist-ruled state shares at least part of its boundary with another communist-ruled state; and feelings of common hostility toward the noncommunist environment which, it is felt, are reciprocated by and to some extent caused by hostility from the outside. Finally, the system is made up of a number of subsystems: not only are the basic building blocks of the international communist system -- the states -themselves systems, but there are important political and geographic subsystems. The former is made up of the Sino-Soviet dominant subsystem, the Soviet-led subsystem (including Mongolia and the European states less Albania, Rumania, Czechslovakia, and Yugoslavia), the

Chinese-led subsystem (Albania is the only non-Chinese adherent as jet), and the intrabloc communist neutrals (Yugoslavia, Rumania, North Korea, North Vietnam, Cuba, and now, perhaps, Czechslovakia). Geographic subsystems include: the East European subsystem, the Sino-Soviet core system, the Asian communist state system, and (for want of a better term) the "non-propinquity" subsystem, of which Cuba is presently the only member.

It is true that the divergencies apparent in each of these characteristics of the system are sometimes pronounced, so that the trend in many of them, moving from closer ties to more loosely-knit bonds, indicates that the system may be loosening up greatly, if not exactly splitting. Thus, in some cases important channels of communication are now constricted. In the Sino-Soviet instance, exchanges of tourists and mass organization delegations have ceased, while the rate of exchange of messages at the official level has, at the least, gone down, (to say nothing of the change in the tone of their content). Differences in the character of domestic institutions, treaties, and membership in intrabloc international institutions are increasingly important and help to dictate alignments within the system. Some

parties read the classics of Marxism-Leninism differently than others; some have come to power (a factor which often closely influences domestic and external polícies in the post-power regime phase) in ways radically different from others; and some do not feel the same intense degree of hostility toward and from the environment. It is important to note these and we shall analyze the dynamics of these trends in a more detailed manner below. The point to be made here, however, is that systems theory constrains us first to set down the characteristics and attributes of the system in the static sense, and only then to investigate their movements. And if we look at the communistruled state system in this regard, we must be impressed by the solid basis on which it rests, despite all that has happened within the bloc since 1956. This conclusion contrasts with the rather unstable basis of other supordinate state systems studied so far.

Isomorphism: There are a number of isomorphic properties of the political subsystems making up the international communist system, and these affect the structure and development of that system. All communist parties, for instance, run themselves in very similar manners: they have a pyramid of authority institutions, each less

representative of the whole and each smaller in membership than the rung immediately below. Generally there is a tendency toward very small group, or one man, leadership. The top group holds office for a lengthy period, party rules or constitutional provisions to the contrary. All of the parties have remarkably similar rules of organization, and all tend to emphasize the centralist features of democratic centralism. These features influence the international communist system both by predisposing bloc meetings to be run and prepared for in a manner similar to central committee or congress meetings -- with public declarations and statements unanimously adopted serving as the end-points of the meeting and with debate and differences discussed privately beforehand -- and by overlysensitizing the party or state delegations to the political-heirarchical aspects of the event. The latter quality means that there is a tendency in such conferences to eliminate the middle-ground from the continuum stretching from domination of the proceedings by one party, through free and open discussion of issues on their merits, to attendance merely for the purpose of opposing the program of the opposition, to refusal to attend sessions known to be rigged in advance by the opposition. Isomorphism

also extends to such areas as: the absolute prohibition of all nonparty political activity; the planned economy; and control by the party of all nonparty institutions -state, economic, social, and literary. The list could well be extended indefinitely. It is interesting to note that the communists themselves have recognized the existence and, to some extent, the desirability of subsystemic isomorphisms. These are recorded in the 1957 Moscow Declaration of the ruling parties and include: existence of a Marxist-Leninist party exercizing a dictatorship of the proletariat over the rest of society; a workerpeasant alliance within the party; state ownership of the means of production; collectivization of agriculture; a planned economy; party control over literary output and intellectual life; elimination of substate nationalism; and "proletarian internationalism." All of these parallel features in the domestic political systems of the member states obviously make for a much higher degree of isomorphism within the communist international system than is true of most -- if not all -- other regional

The text is found in G. F. Hudson et. al. The Sino-Soviet Dispute (New York: Praeger, 1961), pp. 46-56.
The extract is paraphrased from p. 51.

international systems. The implication is that the system will be better able to handle internal and external challenges as well as be better equipped to absorb internally generated changes than other regional international systems. 12

Boundary: We may distinguish four characteristics of the boundary of the communist international system which mark it off from other regional systems, not only in the physical sense but in regard to the attributes of the communist system itself. 1) It is a relatively compact boundary in the sense that the ratio of system area to total boundary length is low relative to some other

This is not to say, of course, that those challenges and changes will not be severe. They will probably be so. While systems theory can say nothing about historical developments, it can provide us with categories to organize our data and these categories, to some extent, will determine our conclusions. Although systems "theory" is more a set of organizational boxes than a theory in the scientific-empirical sense of the term, it, like any other set of categories, lends a bias to our research by providing room for certain and not for other data and by directing our attention to certain and not to other questions and developments. Systems theory will not allow us to "predict" the effect on the communist international system of the Sino-Soviet struggle, but it does sensitize us to the question of just how strong that system is in terms of its capability of absorbing such internal challenges to its stability as those represented by Sino-Soviet developments since 1956. The other half of the equation, the magnitude of this (and other) challenges and stresses, must be supplied by appeal to facts.

There are no large exposed promontories or peninsulas. Cuba, of course, is exceptional in this regard by being both an island and by being quite distant from the other members of the system. 2) While the system is "boundary parsimonious," its size, by any measure, is It is larger by far than any other regional enormous. system studied so far, both in area and population, and it is the only one which (becuase of its ideological basis) is not limited to its present bounds by geographic and/or cultural-social-racial considerations. 3) The interface between the system and its environment is varigated. That is, the various corners of the system face other systems which are vastly different both from the communist system and each other. Some systems face only one or two (for example, the Southeast and South Asia systems) or even no (for example, the Western Hemispheric system) other system. The communist system, depending on how one defines a system, faces at least seven different systems (the Nordic, NATO, Middle Eastern, South Asian, Southeast Asian, East Asia, and -- in the case of Cuba -the Western Hemispheric systems) simultaneously. This provides great opportunities for penetration of those systems but also carries the danger of exposure to

incursions from without. The latter possibility, however, is lessened to some degree not only by the inherent strength and cohesiveness of the system but by the fourth characteristic of the boundary, 4) Its degree of permeability. Of all the regional international systems, the communist system is the most impermeable. This is true not only in regard to inputs from the environment but as well to systemic output. Such devices as the Iron Curtain and alert border defense by all members of the system assure input impermeability while a combination of internal restrictions (such as those on travel and mail) and rejection by the environment (for instance, NATO defense activities and such other defense measures as Korean-type penetration barriers) impede systemic output to the environment. 13

Environment: The environment of the communist international system obviously is the set of all states external to the system. While it is clearly impossible to describe all the characteristics of the environment, it may be productive to set down those few which seem to matter to

While on the subject of systemic boundaries, we might point out that the internal boundaries of the system, separating communist state from communist state, are almost as constricting and isolating as the external boundaries.

the system. a) Degree of hostility. All members of the bloc view the external world as a whole as more hostile than friendly. It is true that some states -- in particular several of the "neutrals" among the lesser developed countries -- are more consistently friendly with certain members of the system than with either their neighbors or the leaders of the noncommunist world. But the panoply of differences from the communist model in the domestic ordering of their respective societies leads to the conclusion that their foreign policies -- the product at root of domestic institutions -- will normally be anticommunist. The major variables informing this attitude are: first, the degree to which the state in question can be termed "capitalist" (and here the Soviet Union, at least, has seen the wisdom of filling in the void between capitalist and communist with a large number of intermediate categories); second, the degree of freedom which the domestic government gives its native communists (and, allied to that, the domestic strength of the local communist party as well as, lately, its orientation to such intrabloc questions as the Sino-Soviet dispute); and third, the degree of closeness in foreign policy to that of the "leader" of the noncommunist-world, the United States.

b) Degree of Variation. It is important to the system to know whether it faces a monolithic environment or whether, and what kind, of fissures and divisions exist among noncommunist adversaries. Therefore, to the extent that the system as a whole relates itself to the environment, it will take a primary interest in the variation in the attributes of the states it faces. Thus, for instance, it matters greatly whether a state is or is not relatively modernized and developed, powerful or weak, near or distant. West Germany, which is modern, close, but relatively weak (in the nuclear weapons sense of the term) is rated at least equally threatening to the East European-Soviet Union members of the bloc as the United States, which is vastly more powerful and somewhat more "modern" but farther away. Differential responses of bloc members to states external to the system help determine the political dynamics of the system. Thus, in the previous example, while the Soviet Union rates West Germany as a primary threat to her security, China does not and, in fact, may play upon the Soviet fear for her own purposes. The Soviet Union and China probably rate India and Japan as equal in importance in their competitions for extrabloc influence (although they us different methods) since these states

are about the same distance from their respective borders, are about on the same level in the world power hierarchy, and would represent about the same "value" to each if they were to turn communist and align with one communist power against the other. c) Degree of penetrability. The interest which the communist system as a whole and/or each of its member states will manifest in a given state or region external to the system is partially a function of the degree to which the system (or the state in question) is able to influence the domestic politics and foreign policy of the state in question. Although that influence in turn is partially dependent upon some of the factors just mentioned which make up the degree of variation in the environment, it is also somewhat dependent upon such other variables as the global and regional balances of power, in the case of foreign policy, and the personality of the top decision-maker and the strength of the local communist parties and other "leftist" forces, in the case of domestic politics. Thus, Cambodia, a small and weak state close to the borders of the system has largely been able to have its own say with the members of the communist system, as well as been able to suppress the domestic communist movement, chiefly because of the

personality and policies of Prince Sihanouk. Not since 1948 has Greece been subject to intensive penetration by the communist system, despite its intrinsic weakness, its strong (but underground) communist movement, and its nearness to the system. The reasons have to do with the global and regional balances of power, as well as the nature of intrasystem alignments among the Balkan communist-ruled states. Indonesia under Sukarno, on the other hand, allowed itself to become quite open to communist penetration, despite its relatively great distance from the system. The reasons here pertain mostly to the domestic balance of forces and to Sukarno's desire to use the threat of communist support as a foil to help advance his foreign and domestic ambitions.

Integration: The visible mechanisms which hold together the bloc are clear. They consist of the formal supranational, special purpose agencies, such as the Warsaw Treaty Organization, the Council for Mutual Economic Assistance, other international commissions, and the network of treaties on a great variety of subjects. 14

These have been studied in some detail and we do not wish to repeat such analyses here. By way of reference, the following sources, and the bibliographies referred to therein, may be cited. Zbigniew Brzezinski,

It has often been noted that there is no single bloc-wide formal organization and it does not seem that there will be one in the near future. The trend has, in fact, been away from formal integration. Even such "institutions" as the bloc meeting for purposes of working out common ideological statements seem a thing of the past. Although it may be beneficial, for demonstrative purposes, to measure this decline quantitatively through study of the variation in (say) Sino-Soviet trade, tourist exchange, mail flow, and other Russett et al type indicators, it is doubtful whether we shall be much farther ahead than we would be after considering the now-large descriptive literature on the decline of Sino-Soviet relations. 16

The Soviet Bloc (Cambridge: Harvard University Press, 3rd edition, 1967); Kazimierz Grzybowski, The Socialist Commonwealth of Nations (New Haven: Yale University Press, 1964); Michel Kaser, Comecon (New York: Praeger, 1965); and Jan F. Triska and Robert M. Slusser, The Theory, Law, and Policy of Soviet Treaties (Stanford: Stanford Unisity Press, 1962). Studies on the Asian communist subsystem are, as yet, rare.

¹⁵ Bruce M. Russett et al, World Handbook of Political and Social Indicators, (New Haven: Yale University Press, 1964).

For two such quantitative studies, see M. George Zaninovich, "Pattern Analysis of Variables Within the International System," Journal of Conflict Resolution, Vol. VI, No. 3 (September 1962), pp. 253-368; and P. Terry Hopman, "International Conflict and Cohesion in the Communist System," International Studies Quarterly, Vol. 11, No. 3 (September 1967), pp. 212-236. Although the former

Just as important as these formal and quantitative modes of integration of the system are informal trends, of which two come to mind: the trend in intrasystem ideological thoughts, and the personal relations among the elites of the ruling parties. As to the former, it can surely be said, at a minimum, that ideological integration is at a level quite a bit higher than that which exists in other regional systems studied so far but that the trend is moving rapidly in the opposite direction. Marxism-Leninism provides an integrative base which is duplicated nowhere else. Despite the events in Sino-Soviet relations since 1956 (to say nothing of the case of Yugoslavia and the more minor deviations of Poland and other East European countries), an irreduceable minimum remains. Comparisons of the treatment, by the states in the communist system, of certain ideological topics is essential to any trend analysis of ideological integration. for example, the Soviet Union and China tend to stand on opposite sides of most ideological issues -- from treatment of material incentives for workers to views of the

article considers joint Sino-Soviet attitudes toward the United States, and is therefore not directly applicable, it is suggestive of what can be done with a time-dependent analysis of the same data when considered separately.

national liberation movement -- while the E. European states tend to be more liberal with regard to the arts and literature than do either the Soviet Union or China. 17 And when China's Defense Minister Lin Piao states that ideological study for Chinese should consist 99% of the works of Mao Tse-tung and 1% of the works of Marx, Engels, Lenin, and Stalin, obviously the trend is away from ideological integration with the rest of the system, and especially with the Soviet Union, where Mao's works are not consulted. Concerning relations among the party elite, it may be said that three trends militate against systemic integration. One is the mere passage of time, which works not only to set older generations (who had much in common either in the Comintern or in being East European lackeys of Soviet power) against younger generations (who have to run differentially modernizing societies and economies and who do not feel the same degree of indebtedness to the Soviet Union), but also to divide each national communist party off from the other as each becomes ever more

This writer is not aware of the existence of any bloc-wide studies of ideological matters. If the field of comparative communist studies is to progress, it may be that across-the-bloc comparative ideological studies will need to replace the present one-country exposition or two-country comparisons.

engrossed in solving national problems. A second involves the replacement of revolutionaries by bureaucrats. This process is evident in every communist state, but at a differential rate and with different degrees of accept-Thus, the oldest communist state, the Soviet Union, exhibits a high state of bureaucratization and seems to accept it, while China quite a bit younger, is fast bureaucratizing but (if Mao's reaction evidenced in the Cultural Revolution is any guide) is desperately resisting it. Although bureaucratization in the long run should prove to be an integrating factor, until all the members of the system are "in place," the differential bureaucratization evident at present probably promotes systemic differentiation. A final trend among communist elites militating against integration is the replacement of communist internationalists with communist nationalists in those states where the former were put into office by Soviet power and, contradictorily, the change in emphasis by those communist nationalists who came to power independently of Soviet power from nationalism to revolutionary internationalism. The former trend is evident in East Europe and North Korea while the latter is apparent

in China, North Vietnam, and Cuba. ¹⁸ As in the previous trend, the differential effects of these developments makes for less, not more, integration.

Differentiation: There are a multitude of factors, indices, and continua by which to measure the distinguishability of the states comprising the communist international system. We seek among these a series which will be both politically significant, well-defined and researched, and capable of comparison with other systems. Fortunately, such a series is available in the Banks and Textor list of 57 politically relevant "raw characteristics" of 115 different politics. 19 All 14 members of the communist system are accounted for and Appendix A lists the raw characteristics by country. Unfortunately, some data are often more than a half decade old. Nonetheless, most of it measures slowly changing attributes and proves suitable for our purposes. We present this data in Appendix A and draw out some possible generalization in the next few pages.

With this data, we can speak of some of the characteristics of the communist states which are held in common

A third trend is exemplified by Yugoslavia, which has given up both extreme nationalism and internationalism in favor of a quiescent mixture of each.

¹⁹ Arthur S. Banks and Robert B. Textor, A Cross-Polity Survey (Cambridge, Mass.: MIT Press, 1963).

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as well as to note the "degree" of differentiation among them. Let us define as common characteristics all those which describe nine or more of the fourteen communistruled states and define characteristics indicating differentiation as those which are held in common by eight or less states and where the dispersion seems rather evenly divided. We see that of the 56 characteristics. 20 36 are held in common by nine or more communist states and only 20 are spread among them enough to call them differentiated characteristics. Thus, in describing the "common" characteristics, we have the following "typical" profile; 21 East European in location; medium population density (100-299 per square mile); absence of press freedom; racially homogeneous (90% or more of one race); not a former colonial ruler; later European or offshoot of later European historical types of political modernization; advanced modernization (that is, to completion of transitional phase prior to 1945); doctrinal in ideological orientation; a mobilization regime; totalitarian in constitutional style; politically stable since the communist

We have eliminated Bank and Textor's characteristic 57, "Communist Bloc" as being redundant for our purposes.

The definitions of these terms, in parantheses, are taken from the corresponding section of Banks and Textor, pp. 54-117.

party came to power; non-polyarchic (i.e. non-representative in form as well as context); having a non-competitive election system (single-list voting or no elected opposition); no genuine toleration of autonomous groups; negligible interest articulation by associational groups (i.e. politics not governed by interest group pressures); very significant interest articulation by institutional groups (the party, the army, the managers, the ideologues, etc.); negligible interest articulation by political parties (other than the communist party itself); significant interest aggregation by the executive; a stable, communist one-party political system; negligible interest aggregation by the legislature; negligible personalismo (i.e. no significant personalist tendencies, defined as following a leader for personal, individual, and/or family reasons rather than by virtue of attraction to a political idea or program, or membership in a political party); elitist political leadership (recruitment confined to a particular ideological strata); formal and effective unitarism in vertical power distribution (as contrasted to federalism); nealigible horizontal power distribution (i.e. complete dominance of government by the party); communist legislative-executive structure (i.e. party

control of state political institutions); wholly ineffective legislative power; a unicameral legislative; a dominant central executive; a semi-modern bureaucracy (meaning a largely "rationalized" bureaucracy of limited efficiency because of shortage of skilled personnel, inadequacy of recruitment or performance criteria, excessive intrusion by non-administrative organs, etc.); supportive political participation by the military; a politically significant role for the police; and a communist-style (i.e. party-dominated) legal system.

The other 20 characteristics, measuring dispersion, show no singular trend. The fact that a large number of characteristics are held in common indicates that the degree of differentiation in the communist international system as a whole is not great. Furthermore, if one makes a frequency count of the degree of commonality of the characteristics held by the 14 states, 10 characteristics are held in common by all states and 14 characteristics held by 13 of the states (significantly, Cuba, the only non-contiguous member, was the deviant state in most of these.) This may reflect the political situation in Cuba in 1960. The situation has now changed so that Cuba is similar in most indices to the other

communist states). There is then a rapid dropoff in commonly held characteristics and this dispersion holds all the way down the line. Thus the degree of commonality is very great. It would be interesting to compare this listing with similar lists drawn up for other regional systems: one could then be in a better position to determine both the degree of "systemness" of each such grouping and the degree of similarity and differentiation between systems.

One perhaps significant fact stands out when making a detailed comparison of the characteristics within the communist system: the East Asian members (China, Mongolia, North Korea, and -- for this purpose -- North Vietnam) are somewhat closer to each other in political characterization than they are to the rest of the bloc. Thus, 41 out of the 56 listed characteristics are held in common by 3 or more of these four states 22 as compared with 36 for all fourteen. A similar conclusion holds in the case of the East European states (i.e. the Soviet Union, for these purposes, is excluded). Thus, we may conclude, on the basis of this data 23 that, among other things, the

²² In some cases where data was listed as "unascertained," an estimate from experience was made.

We have presumed the reliability of the data. Further inquiry and updating may change the results. If so, however, we suspect that modifications will be slight.

communist international system is corprised of several socio-economic-political subsystems which are also geographically bound. the East European, the East Asian, and the Soviet Union. He see measures of the degree of dispersion in the system, pointing toward the existence of three subsystems, are still too crude to allow us to say much about the political relations between members of the same subsystem. We do not know on this basis, for example, of North Korea's attitude toward the Soviet Union and China, nor of Albania's close political ties with China and the absence of such ties with her East European neighbors. For such alignments, theoretical (or perhaps nontheoretical) treatment beyond the scope of general systems theory is needed.

We exclude considerations of the Cuban question for lack of properly updated measures.

IV. USEFULNESS OF SYSTEMS THEORY TO COMPARATIVE COMMUNISM

Enough has been said already, however, to enable us to draw conclusions concerning the efficacy of general systems theory for the study of communist systems. Perhaps we may say the following. First, it seems apparent that general systems theory, as recorded here, can indeed serve as a framework for studying and for organizing the study of, the communist international system. The concepts detailed above are, for the most part, sufficiently general to contain not only a variety of factual descriptions of the system but also a number of partial theoretical approaches to communist politics. Much of decision-making theory, traditional power political analysis, and structural-functional analysis, to mention three such approaches, can be subsumed under the general system framework. On the other hand, second, it seems that general systems theory is too broad to catch many of the important political developments within the system. Whereas this approach, for instance, would allow us to predict the emergence of the three subsystems noted above, it does not say when or how or what happens within each subsystem. General systems theory, in its present political science form,

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serves as an excellent framework and system of category "pigeon-holes," but is devoid of particular content and can therefore tell us little about the communist system which we could not have found out in other manners. 25 But the great strength of systems theory, in the third place, lies in its ability to permit us to see phenomena in a balanced perspective which is not obvious at first. It stresses, for instance, factors of stability as well as instability and this is particularily valuable at a time when the latter set of factors would seem to dominate. It stresses both static-structural features and dynamic growth and decay features. It reminds us that political systems evolve and that, therefore, what was true in 1956 is not necessarily the case in 1968. And it places emphasis upon relations with the environment as well as intrasystemic variables operating autonomously. Last, general systems theory frees us, to some extent, from the bonds of traditional categories of analysis: it slices the pie in a different way (in fact, in many different ways) and in so doing it may uncover facts and relationships which may have been hidden from view by the overlayer

²⁵ It may be, of course, the other approaches to systems theory, as listed above, will help fill this gap.

of those traditional categories. Many of the examples listed in Section II above devoted to a detailed listing of general systems categories may be taken as cases in point.

V. THE "RULES" OF THE COMMUNIST INTERNATIONAL SYSTEM

Finally, as a supplement to the present discussion, we set forth a list of "rules" of the communist international system. There are two justifications for this exercise. First, such a listing attempts to fill in an apparent gap in general systems theory. And second, the dynamics of the system can be inspected by means of changes in the number and content of the rules. Although one could postulate a system whose rules are gradually but constantly changing and which is, therefore, impossible to describe over a length of time, we instead assume that the "rules," while changing, vary with sufficient slowness as to appear stationary for at least a year's time. We choose as illustrations 1956 and 1968, years whose separations should help to demonstrate the degree of change in the system.

Neither the Young rendition of general systems concepts nor the Bertalanffy articles in the general systems Yearbook speak of rules of the system. General systems theory, in this regard, seems to be oriented somewhat more to a description of the structural and teleological characteristics of a system than the rules describing its steady state operation or the rules describing how it transforms itself from one steady-state to another. The concept of systemic rules is central to the second "approach" to systems theory, associated with the field of neuro-cybernetics and servo-mechanisms, and with the names of W. Ross Ashby and Morton Kaplan.

1956 Rules of the Communist International System

- No secession is allowed; but disciplining of deviant members, either by bloc or sub-bloc organ concerned by bloc leader, is permitted;
- 2) Communist party monopolizes the domestic politics of member states; a party monopoly of state, government, and society, although proforma-coalitions are allowed;
- 3) A subsystem dominant system, with modified centralism under the bloc leader (the Soviet Union), who decides bloc policy in economic, military, and ideological spheres;
- 4) A hierarchy of states, with the Soviet Union at the top and China more equal than the others; the rest follow according to particular issues and the bloc leader's favor;
- 5) Enmity toward the environment (especially toward the United States and NATO) overshadows intrabloc dissent to the extent that all differences must be settled peacefully and unity maintained;
- 6) All bloc decisions taken by unanimity but with both bargaining and coercion permitted;
- 7) A rudimentary balance of power extant within the system, but not to be taken advantage of (internally or externally) by any member;
- No public airing of differences;
- 9) No appeal to or use of the environment by any member for solution of internal problems;
- 10) Pressure (economic, threat of force, isolation) or force itself may be used to enforce bloc decisions or decisions made for the bloc by the bloc leader. A hierarchy of such sanctions set up, with force the final measure.

- 11) The system will expand externally, with (more or less) centralized direction, according to opportunity but not at risk of war.
- 12) Political boundaries are sacrosanct no matter how much they seem to violate national boundaries;
- 13) Rule of defense: an attack on any one member of the system is considered an attack on all members, with decision on manner and scale of response largely centralized in the Soviet Union;
- 14) The bloc leader, possessing nuclear weapons, has special responsibility for relations with the environment and, hence, possesses special rights with regard both to contact with the environment and to intrabloc relations.

1968

- No secession is allowed nor is disciplining of deviant member permitted;
- 2) The Commurist party is to monopolize domestic politics of member states; a party monopoly of state, government, and society, although proforma coalitions are allowed; 27
- Disagreement is allowed on the definition of a communist-style government, but such disagreement must not lead to expulsion from the bloc or its breakdown into two or more separately operating entities;
- 4) Rapid decentralization under the impact of the breakup of Sino-Soviet monopoly;
- 5) A "loose bipolar system," with the Soviet Union and China forming the nuclei of opposing camps, together with a number of intra-systemic neutrals;

Yugoslavia seems increasingly to be moving beyond this formulation.

In the sense which Kaplan uses the term. The "rules" of that system should also, therefore, apply.

- 6) Enmity towards the environment no longer overshadows intrabloc dissention. But such enmity continues, making it necessary that intrabloc disputes continue to be settled peacefully;
- 7) Facade of unity no longer need be maintained; differences may be aired publicly as a means of rallying support for one's position;
- 8) Dissention among bloc leaders may be taken advantage of by other members of the system;
- 9) No appeal is permissible to the outside for solution to intrabloc problems; but use may be made of the environment in a manipulative manner as long as relations with a given external state are not as close as relations with the rest of the bloc.
- 10) The system will expand externally according to opportunity but not at risk of war and not through centralized direction;

- 11) Rule of defense: an attack on any one member of the system is considered an attack on all members, but manner and scale of response is decentralized;
- 12) Internal boundaries are no longer sacrosanct and one member may question its boundaries with its bloc neighbors; but force may not be used to rectify such boundaries;
- 13) Those bloc members possessing nuclear weapons deem themselves to have special relations with the environment; but such possession tends to drive them apart within the bloc, to dilute responsibility for bloc safety, and to cause them to pursue separate policies toward the environment.

Inspecting these two lists, we are initially struck at the vast differences in the two listings. Setting out such rules allows us to conclude, in some specific manners, just how far the bloc has come in the intervening 12 years.

Compared with 1956, it is a very different set of arrangements under which the same (with the exception of Cuba's addition) set of states operates at present. Of the 14 rules extant in 1956, only 1 (rule 2) appears to carry over without substantial change. All the rest have either undergone modification or have been replaced by an entirely different "rule." But despite these great changes, one is also struck by the fact that the more recent "rules" still provide for a subsystem which exhibits superior elements of strength and cohesion. One must therefore wonder whether the divergencies stemming from the Sino-Soviet differences have perhaps reached a limit or, if they have not, whether any further moving apart will encounter resistance of a much higher magnitude than was previously the case. Despite the Sino-Soviet dispute and its attendant ramifications throughout the communist international system, that system still appears to exhibit resiliance under strain more than an inexorable trend toward breakup.

Appendix A

Bank and Textor Characteristics of Fourteen Communist Countries *

	Characteristic	ALB	BUL	CPR	CIIB	CZE	DDR	HUN
1.	Areal Group	EE	EE	EA	CA	EE.	EE	EE
2.	Size	SM	SM	VŁ	SM	SM	SM	SM
3.	Population	SM	ME	VL	ME	ME	ME	ME
4.	Population Density	ME	ME	ME	ME	ME	HI	ME
5.	Population Growth							
	Rate (%)	HI	LO	HI	HI	LO	LO	LO
6.	Urbanization (%)	LO	HI	UA	HI	HI	HI	HI
7.	Agricultural							
	Population (%)	HI	ME	HI	ME	FE	LO	ME
8.	Gross National							
	Product	VL	LC	HI	LO	ME	ME	1.0
9.	GNP Per capita	LO	ME	VL	ME	нī	HI	ME
10.	International							
	Financial Status	VL	LO	UA	LO	ME	UA	ME
11.	Economic Develop-							
	ment	UV	IN	UD	UD	DV	DV	IN
12.	Literacy Rate	ME	ME	MD	ME	HI	HI	HI
13.	Press Freedom	AB	EA	AB	AB	AB	AB	ΛB
14.	Newspapers/1000							
	Population	LO	ME	LÜ	ME	ME	HI	ME
15.	Religious							
•	Configuration	MI	EC	ND	FR	MX	MX	MX
16.	Religious							
	Homogeneity	HE	HO	ND	He	HE	HE	HE
17.	Racial Homogeneity	HO	НО	но	HE	НО	НО	НО
18.	Linguistic							
	Homogeneity	НО	WH	NO	HO	ST	НО	НО
19.	Independence Data	19	19	18	19	20	AM	19
20.	Westernization	HW	SW	SW	SW	HW	HW	HW
21.	Former Colonial							
	Ruler	IR	IR	IR	SP	IR	IR	IR
22.	Political Moderniza-							
	tion: Historic	LE	LE	NE	AU	LE	LE	LE
23.	Political Moderniza-							
	tion: Periodiza-							
	tion	AD	AD	AD	AD	AD	AD	AD
24.	Ideological	DT	DT	DT	AB	DC	DC	DC

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^{*}A full spelling of the abbreviations is given on p. 68.

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	Characteristic	ALB	BUL	CPR	CUB	CZE	<u>DDR</u>	HUN
25.	System Style	MO	MO	MO	MO	MO	MO	MO
26.	Constitutional							
	Status	TO	TO	TO	TO	TO	TO	TO
27.	Governmental							
	Stability	W2	W2	W2	UA	W2	W2	AM
28.	Representative							
	Character	NP	NP	NP	NP	NP	NP	NP
29.	Election System	NC	NC	NC	UA.	NC	NC	NC
30.	Group Freedom	NT	NT	NT	NT	NT	NT	NT
31.	Political							
	Enculturation	UA	UA	UA	UA	UA	UA	UA
32.	Sectionalism	MD	MD	MD	NG	EX	NG	UA
33.	Interest Articula-							
	tion: Associational							
	Groups	NL	NL	NL	NL	NL	NL	LI
34.	Interest Articula-							
	tion: Institutional							
	Groups	VS	VS	VS	VS	VS	VS	VS
35.	Interest Articula-							
	tion: Associational							
	Groups	MD	LI	SI	LI	LI	MO	LI
36.	Interest Articula-							
	tion: Anomic Groups	UA	UA	UA	UA	IF	FR	ÀМ
37.	Interest Articula-							
	tion: Political							
00	Parties	NG	NG	NG	UA.	NG	NG	NG
38.	Interest Aggrega-							
	tion: Political	***	***	***		***		***
20	Parties	UA	UA	UA	UA	UA	UA	UA
39.	Interest Aggrega-	774	774	TTA	TTA	TTA	MO	TTA
40	tion: Executive	UA	UA	UA	UA	UA	NG	UA
40.	Interest Aggrega-	NC	NO	NC	TTA	NO	NC	NC
<i>l</i> . 1	tion: Legislature	NG	NG	NG	UA	NG	NG	NG
41.	Party System:	ΔD	ΩD	ΩD	OB	OΒ	ΔĐ	ΩĐ
42.	Quantitative	OP	OP	OP	OP	OP	OP	OP
42.	Party System: Qualitative	СО	СО	СО	UA	СО	СО	СО
43.	Party Systems:	CO	CO	CO	UA	CO	CO	CO
43.	Stability	ST	ST	ST	UA	ST	ST	ST
44.	Personalism	NG	NG	NG	NG	NG	NG	NG
45.	Political Leader-	MG	110	110	110	110	MG	.110
₹3.		EL	EL	EL	UA.	EL	EL	NG
46.	Leadership	بديد	L	باند	UA.	ii.	بلنة	NG
→ ♥•	_	NG	NG	PR	PR	мG	NG	NG
	CHALTSMA	М	110	T.W.	T. IV	MG	ИО	ИО

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	Characteristic	ALE	<u> BUI</u>	CPF	<u>CUE</u>	<u>CZI</u>	DDR	R HUN
47	AMENDACE TOWER							
	Distribution	UN	UN	UN	UN	UN	UN	tmt
48.	I OWEL OI		72.	011	OIV	OM	OIA	UN
49.	Distribution	NG	NG	NG	NG	NG	NG	NG
49.	B TYECHI IVE	!						110
50.	Structure Legislature: Current	CO	CO	CO	UA	CO	CO	СО
50.	Legislature: Current Status							- -
51.		WI	WI	WI	UA	WI	WI	WI
	Character	UC	TIC	110				
52.	Executive Current	OC.	UC	UC	UA	UC	UC	UC
	Status	DO	DO	DO	DO	DO	110	
53.	Bureaucracy:		20	ЪО	Ю	DO	Ю	DO
<i></i> (Character	SE	SE	SE	SE	SE	SE	SE
54.	Military: Political				02	OL	3E	SE
55.	Participation	SU	SU	SU	AM	SU	SU	su
56.	Role of Police	PS	PS	PS	PS	PS	PS	PS
50.	Legal System: Character							-
	CHAIGCEE	CO	CO	CO	UA	CO	CO	CO
	Characteristic	NOD	MDD	DOT	D			
1.		<u>NOR</u>	MPR	POL	RUM	sov	NVN	YUG
2.	Areal Group Size	EA	EA	EE	EE	EE	SA	EE
3.	Pepulation	SM	LA	ME	ME	VL	SM	ME
4.	Population Density	ME	SM	LA	LA	VL	ME	LA
5.	Population Growth	ME	LO	ME	ME	LO	ME	ME
	Rate (%)	ŪΑ	ні	7.0				
6.	Urbanization (%)	UA	LO	LO HI	LO	UA	LO	LO
7.	Agricultural	U	LU	uT	HI	HI	UA	LO
0	Population (%)	HI	HI	ME	HI	ME	UA	117
8.	Gross National				-11.	PIE	UA	HI
9.	Product CNP Page Co. 1	VL	VL	ME	ME	VH	LO	ME
10.	GNP Per Capita	VL	VL	ME	ME	HI	VL	ME
10.	International Financial Status						• • •	1111
11.	Economic Development	UA	VL	ME	ME	VH	UA	ME
12.	Literacy Rate	vu	VU	VU	IN	IN	DV	VU
13.	Press Freedom	UA A B	UA	HI	HI	HI	UA	ME
14.	Newspapers/1000	AB	AB	IT	AB	IT	AB	IT
	Population	UA	ME	ME	\ <i>a</i>			
15.	Religious	UM	ME	ME	ME	ME	UA	LO
	Configuration	UA	BU	CT	EO	UA	UA	ΜX

SOUTH SECTION OF THE PROPERTY OF THE PROPERTY

	Characteristic	<u>NOR</u>	MPR	POL	RUM	sov	<u>nvn</u>	YUG
16.	Religious							
	Homogeniety	UA	НО	НО	НО	UA	UA	HE
17.	Racial Homogeneity	НО	НО	но	НО	но	НО	НО
18.	Linguistic							
	Homogeneity	но	но	но	WE	SH	WE	SH
19.	Independence Data	AM	20	20	19	18	45	20
20.	Westernization	PW	PW	HW	SW	SW	WM	SW
21.	Former Colonial Ruler	IR	IR	IR	IR	IR	FA	IR
22.	Political Moderniza-							
	tion: Historic	DT	DT`	LE	LE	NE	DT	LE
23.	Political Moderniza-							
	tion: Periodiza-							
	tion	AD	AD	AD	AD	AD	ET	AD
24.	Ideological	DO	DO	DO	DO	DO	DO	DO
25.	System Style	MO	MO	MO	MO	MO	MO	MO
26.	Constitutional							
	Status	TO	TO	TO	TO	TO	TC	TO
27.	Governmental							
	Stability	W2	W2	W2	W2	W2	W2 '	W2
28.	Representative							
	Character	NP	NP	NP	NP	NP	NP	NP
29.	Election System	NC	NC	NC	NC	NC	NC	NC
30.	Group Freedom	NT	NT	NT	NT	NT	NT	NT
31.	Political							
	Enculturation	UA	UA	HI	UA	UA	UA	LO
32.	Sectionalism	NG	NG	NG	NG	EX	NG	EX
33.	Interest Articula-							
	tion: Associational							
	Groups	NG	NG	LI	NG	LI	NG	AM
34.	Interest Articula-							
	tion: Institutional					_	_	_
	Groups	VS	VS	VS	VS	VS	VS	VS
35.	Interest Articula-							
	tion: Associational							_
	Groups	SI	SI	MO	MO	MO	SI	MO
36.	Interest Articula-							
	tion: Anomic Groups	UA	UA	MO	UA	MO	UA	MO
37.	Interest Articula-							
	tion: Political	***						
4.0	Parties	NG	NG	NG	NG	NG	NG	NG
38.	Interest Aggrega-							
	tion: Political			•••				
20	Parties	UA	UA	UA	UA	UA	UA	UA
39.	Interest Aggrega-						4	
	tion: Executive	UA	UA	LI	UA	UA	UA	LI

	Characteristic	NOR	MPR	POL	RUM	sov	NVN	YUG
40.	Interest Aggrega-							
	tion: Legislature	NG	NG	NG	NG	NO	NO.	
41.	Party System:	210	NG	NG	MG	ng	NG	NG
	Quantitative	OP	OP	OP	OP	OD	0.70	
42.	Party System:	5.	O1	OF	UP	OP	OP	OP
	Qualitative	CO	CO	CO	СО	CO	00	
43.	Party Systems:		00	CO	CU	CO	CO	CO
	Stability	ST	ST	ST	ST	ST	.om	0.0
44.	Personalism	NG	NG	NG	NG	NG	ST	ST
45.	Political Leader-		210	110	NG	NG	NG	NG
	ship	EL	EL	EL	EL	EL	EL	271 W
46.	Leadership			22	1411	EL	EL	EL
	Charisma	MO	NG	NG	NG	AM	PR	100
47.	Vertical Power of		-,-	2.0	110	ALI .	ra	MO
	Distribution	UN	UN	UN	UN	UN	UN	7787
48.	Horizontal Power of			•••	011	OIV	UN	UN
	Distribution	NG	NG	NG	NG	NG	NG	NG
49.	Legislative-Executive	:			2.0	110	NG	MG
50	Structure	CO	CO	CO	co	CO	CO	co
50.	Legislature: Current					00	CO	CO
53	Status	WI	WI	WI	WI	WI	WI	WI
51.	Legislative						W.T.	44 T
5 2	Character	UC	UC	UN	UN	ВІ	UN	BI
52.	Executive Current						011	DI
52	Status	DO	DO	DO	DO	DO	DO	DO
53.	Bureaucracy:						20	БО
54.	Character	SE	SE	SE	SE	SE	SE	SE
J4 .	Military: Political					_		0 2
55.	Participation		SU	SU	SU	SU	SU	SU
	Role of Police	PS	PS	PS	PS	PS	PS	PS
JU.	Legal System:							~ ~
	Character	CO	CO	CO	CO	CO	СО	CO

<u>Abbreviations</u>

A.	States							
ALB	Albania	DD	R	East Germany	RI	JM :	Rumania	
BUL	Bulgaria	н	HUN Hungary			V	Soviet	
CPR	China	KO)R	North Korea			Union	
	(mainland)	MF	PR	Mongolia	NVN		North	
CUB	•	PO		Poland	2,12,		Vietnam	
CZE	Czechslovakia				Y		Yugoslavia	
В.	Characteristics							
AB	Absent	IN	In	termediate	SE	Sen	i-Modern	
AD	Advanced	IR	Ir	relevant	SH	Str	ongly	
AM	Ambiguous	IT	In	termittent		Het	erogeneous	
ΑÜ	Autochthonous	LA	La	rge	SI	Sig	nificant	
BI	Bicameral	LE		ter	SM	Sma	11	
BU	Buddhist		Eu	ropean	SP	Spa	in	
CA	Caribbean	LI	Li	mited	ST	Sta	ble	
CO	Communist	LO	Lo	W	SU	Sup	portive	
CT	Catholic	MD	Mo	derate	SW	Sig	nificantly	
DC	Doctrinal	ME	Me	dium		Wes	ternized	
DO	Dominant	MI	Mi	xed	TO	Tot	alitarian	
DT	Developed	MO	Mobilization		UA	Una	scertained	
	Tutelary	MX	Mi	xed	UC	Unicameral		
DV	Developed		Ch	ristian	UD	Und	erdeveloped	
EA	East Asia	NC	No	n-com-	UN	Unitarism		
EE	East Europe		рe	titive	VL	Ver	y Large	
EL	Elitist	ND	No	Data	VO	Ver	y Low	
EO	Eastern	NE	No	n-	VS	Ver	y Significant	
	Orthodox	NG	Eu	ropean	VU	Ver	y Under-	
ET	Early	NG	Ne	gligible		dev	eloped	
	Transitional	NP	No	n-	WE	Wea	kly	
EX	Extreme		Po	lyarchic		Het	erogenecus	
	France	NT	No.	t-	WH	Wea	kly	
FF	Formal		То	lerated		Hom	ogeneous	
	Federalism	OP	0n	e-Party	WI	Who	lly	
FR	Frequent	PR	Pr	onounced			ffective	
	Heterogeneous	PS	Po	litically	W2	Sta	ble Since	
	High		Si	gnificant		Wor	ld War II	
	Homogeneous	PT	Pr	otestant	18	Bef	ore 19th	
	Historically	PW	Pa	rtially			tury	
	Western		We	sternized	19	180	0-1913	
IF	Infrequent	SA	So	utheast	20	191	4-1945	
			As	ia	45	Aft	er 1945	